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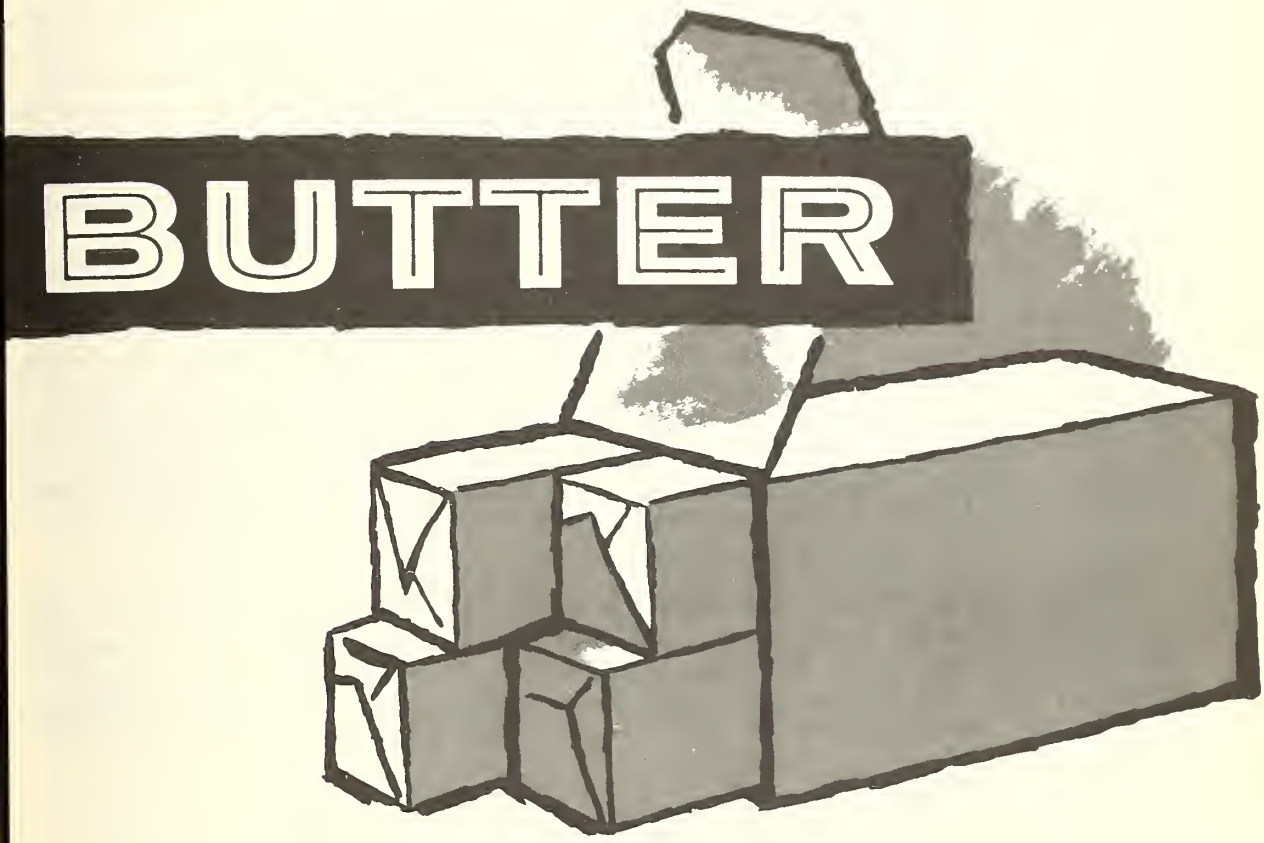
AGRICULTURAL MARKETING SERVICE
MARKETING RESEARCH DIVISION

MAY 16 1959
U.S. DEPARTMENT OF AGRICULTURE

MARKETING MARGINS for BUTTER



- assembling
- manufacturing
- transporting
- packing
- wholesaling
- retailing

Marketing Research Report No. 289
UNITED STATES DEPARTMENT OF AGRICULTURE

PREFACE

This report on marketing margins and costs for butter is one of several such reports on food items published by the United States Department of Agriculture. This group of reports, issued by the Marketing Research Division, Agricultural Marketing Service, is designed to meet a need for more information on farm-to-consumer price spreads on food.

Changes of a far-reaching nature have been taking place in the production and marketing of butter. These changes are bringing about a fuller utilization of both the fat and nonfat solids in milk produced by farmers and a more effective use of the labor, supplies, equipment, and transportation services applied in the marketing of butter. Greater efficiency is reflected in the fact that during the period of war and postwar inflation, the marketing margin per pound of butter has increased considerably less than the amount which would reflect the declining value of the dollar.

The butter industry has been beset by severe competitive conditions. At the consumer end of the marketing process, there has been a great increase in the use of margarine and other nondairy fats. At the farm level, the increased capacities of creameries and the need for greater flexibility of operations has created for many plants serious problems of acquiring sufficient supplies of cream or milk for efficient operation. Butter also has attracted attention because it is one of the dairy products which has been purchased and stored as part of a Government program to support farm prices of milk and butterfat.

This report contains observations of specific shipments of butter from a representative group of creameries in Minnesota and Iowa. It is believed that the accounts of the services performed and the charges made by each agency taking part in the marketing process will help farmers and consumers get a better understanding of how butter is marketed.

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SUMMARY

Creamery butter, despite a decline in per capita consumption from 13.3 pounds to 8.5 pounds from 1926 to 1957, continues to provide farmers with the largest single outlet for milk for manufacturing purposes. The butterfat from 29 billion pounds of milk was used in the making of creamery butter in 1957. This was 22.9 percent of the total amount of milk produced in the United States.

The farm value of butterfat used in making butter has fluctuated more widely than the retail price of butter. During the period from 1919 to 1957, the farmer's share of the retail price, on an annual basis, has ranged from a low of 53 percent in 1932 to a high of 84 percent in 1944.

No pronounced single trend is noted in the marketing margin during the 1919-1957 period. The marketing margin has tended to be greater in amount but smaller proportionally during years when the retail price has been relatively high. During the 10 years, 1948-57 the marketing margin has fluctuated within a fairly narrow range (20.1 to 22.8 cents) and unlike the margins for most farm commodities, it has shown only moderate tendencies to increase. In 1957, the marketing margin for butter was 13 percent greater than the 1947-49 average, compared with an increase of 33 percent for all dairy products.

The two components of the marketing margin are: (1) The farm-wholesale spread; and (2) the wholesale-retail spread. The increase in the marketing margin for butter in 1957, compared with the 1947-49 average, has been in the wholesale-retail component. This segment of the marketing margin increased 5.3 cents between 1947 and 1957. During the same period the farm-wholesale component decreased 1.5 cents.

Extensive changes have taken place in the marketing of butter over the years. For the purpose of providing greater understanding of the butter marketing process, 10 actual shipments of butter have been studied. These shipments of butter by no means exhaust the variations in the marketing process, but they do provide concrete descriptions of the way butter is now marketed and indicate some of the important variations in the marketing process. They illustrate the variety of the services which the several marketing agencies are called upon to perform in order to process butter and to move the finished product to the consumer. The reports also help to indicate the diversity of the problems involved and something of the uniqueness of each marketing process.

MARKETING MARGINS FOR BUTTER

By Edmond S. Harris
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THE "MARKETING MARGIN"

The "marketing margin" is the difference between the price per pound the consumer pays for butter and the price the farmer receives for an equivalent quantity of butterfat in cream. A creamery is able to make about 24 percent more butter, by weight, than the butterfat received from farmers because of the nonfat elements in butter, principally water. This is known as "overrun." 1/ Therefore, the marketing margin for butter would be equal to the price the consumer pays for one pound of butter less the payment the farmer receives for 0.8065 pound of butterfat in cream. The marketing margin includes the costs of the procurement of the raw materials from the farm and all charges related to the manufacturing, printing, packaging, transportation, storage, and selling of butter. The payment received by the farmer is called the "farm value."

CHANGES IN THE MARKETING OF BUTTER

Creamery butter represents the largest single outlet of milk used for manufacturing purposes. In 1957, the aggregate production of creamery butter was 1.4 billion pounds. The butterfat from about 29 billion pounds of milk, 22.9 percent of the total amount of milk produced in the United States, was used directly for this purpose. 2/

The war and postwar years have brought important changes in the butter industry. These changes have affected all phases of the organization and operation of the industry, from methods of procuring the raw materials to the marketing of the finished product.

During this period, the processing and marketing phases of the industry have been affected by higher equipment and construction costs as well

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1/ There are differences in the proportion of overrun reported by creameries based on differences in operating efficiencies and on different degrees of accuracy in testing for butterfat. The overrun for butter made from farm-separated cream is usually higher than that made from whole milk. The 24-percent allowance for overrun has been used in each case as a sufficiently close approximation for this study.

2/ Exclusive of milk used in the manufacture of cheese, from which whey fat was recovered for churning into butter.

as by rising costs of labor, fuel, and other items of operation. In addition to these factors which are related to the general economic conditions of the period, several long-term trends have had a special impact on the butter industry during these years. At the consumer end of the marketing process, competition from nonmilk fats has been intensified partly as a continuation of a trend and partly because of the removal of certain legislative restrictions with respect to the marketing of such fats. At the producing end of the marketing process, the war and postwar periods have been marked by a shift by many farmers from the sale of cream to the sale of milk. This shift has been due to the increased commercial value of nonfat solids in milk and the greater availabilities of the necessary processing equipment. It has also been encouraged by improvements in roads and trucking facilities.

Many creameries have found it impossible to continue profitable operations with inefficient facilities. Hundreds of these, especially among the smaller ones, have closed. Others have met changing conditions by consolidation and by new investment in equipment and buildings, enabling them to expand operations, improve quality, and usually to receive milk as well as cream from farmers. Surviving plants are, on the average, larger, more modern, and more diversified than those of the prewar period.

Methods of assembling the raw material from the farms and handling it at the creameries have undergone considerable change largely related to the shift from cream to whole milk delivery by many farmers. Milk requires more frequent pickups at the farm and greater care in transport than does cream. At the creamery, extra procedures and equipment are required to separate the cream and to handle or dispose of the skim milk profitably.

Rising costs and competitive factors have led also to changing practices in the marketing of butter after it leaves the creamery. Creameries and wholesale butter receivers have tried to reduce transportation and handling costs by more efficient consolidation of butter in preparation for carload shipment by rail or truck to the larger consumer markets. These agencies and larger retail handlers, such as chainstore organizations, have sought ways of eliminating intermediate steps in the marketing process from the creamery to the retail outlet. All along the line from farm to consumer, practices to maintain quality have received more attention. There has been increased voluntary use by the trade of the butter grading services of the U. S. Department of Agriculture. Concurrently, there has been a trend toward selling greater proportions of butter under brand names and in some cases there has been more emphasis upon advertising and other promotional techniques.

CHANGES IN THE MARKETING MARGIN

The retail prices, farm values of butterfat in butter, and marketing margins from 1919 to 1957 are shown in table 1 and figure 1. The relation of the farm value to the retail price is also shown. Over the entire period, the farm value of butterfat used in the making of butter has tended to fluctuate more widely than the retail price of butter. The farmer's share of the retail price, on an annual basis, has ranged from a low of 53 percent in 1932 to a high of 84 percent in 1944. During the decade, 1948-57, the farmer's share has ranged from 69 to 76 percent of the retail price. This range may be compared with a range of from 60 to 66 percent in the decade following World War I.

The marketing margin has tended to be greater in amount but smaller proportionally during periods when the retail price has been relatively high. During the ten years 1948-57, the marketing margin has fluctuated within a fairly narrow range (20.1 to 22.8 cents), and unlike the margins for most farm commodities has shown but slight tendencies to increase. In relation to the retail price, which has also been fairly stable, there has been only a slight tendency for the marketing margin to increase in recent years.

Table 2 provides us with data to analyze, for the years 1947 to 1957, the two components of the marketing margin: (1) The farm-wholesale spread, and (2) the wholesale-retail spread. The price used to make this division is the price of 92-score butter in the Chicago wholesale market as reported by the Agricultural Marketing Service. The spread between the farm value and the Chicago wholesale price contains some transportation charges and selling costs, but it mainly represents the gross margin for manufacture of the butter. The spread between the wholesale and retail prices also is in part due to transportation costs, but in the main it represents the wholesaler's and retailer's combined gross margin. This includes costs of printing and packaging the butter which is a phase of the manufacture of the finished product.

The marketing margin increased relatively less during the 1947-57 period for butter than for any of the other major dairy products. In 1957, it was 13 percent greater than the 1947-49 average, compared with an increase of 33 percent for all major dairy products. The increase in the marketing margin for butter in these years has been in the wholesale-retail component. This segment increased 5.3 cents between 1947 and 1957. During the same period the farm-wholesale component decreased 1.5 cents, so that the increase in the total farm-retail was 3.8 cents. The relation of the two components is shown visually in figure 2.

Table 1.--Retail price, farm value, marketing margin, and farmer's share of retail price of butter, 1919-57 1/

Year	Retail price per pound	Farm value 2/	Margin (farm-retail spread)	Farmer's share
	Cents	Cents	Cents	Percent
1919	68.8	43.8	25.0	64
1920	70.2	45.2	25.0	64
1921	51.8	30.9	20.9	60
1922	47.9	29.6	18.3	62
1923	55.5	34.9	20.6	63
1924	51.8	32.7	19.1	63
1925	54.9	34.2	20.7	62
1926	53.2	33.9	19.3	64
1927	56.0	35.9	20.1	64
1928	56.7	37.2	19.5	66
1929	55.2	36.4	18.8	66
1930	46.1	28.3	17.8	61
1931	35.6	20.5	15.1	58
1932	27.6	14.6	13.0	53
1933	27.3	15.3	12.0	56
1934	31.6	18.8	12.8	59
1935	35.8	23.2	12.6	65
1936	39.3	26.7	12.6	68
1937	40.5	27.7	12.8	68
1938	34.5	22.0	12.5	64
1939	32.3	20.1	12.2	62
1940	35.8	23.7	12.1	66
1941	40.9	28.4	12.5	69
1942	47.0	33.4	13.6	71
1943 3/	52.4	41.4	11.0	79
1944 3/	49.7	41.8	7.9	84
1945 3/	50.4	41.7	8.7	83
1946 3/	70.5	53.9	16.6	76
1947	80.0	61.0	19.0	76
1948	86.2	64.9	21.3	75
1949	72.1	51.9	20.2	72
1950	72.3	52.2	20.1	72
1951	81.4	60.0	21.4	74
1952	85.0	62.6	22.4	74
1953	79.0	56.7	22.3	72
1954	72.4	50.4	22.0	70
1955	70.9	49.2	21.7	69
1956	72.1	50.9	21.2	71
1957	74.3	51.5	22.8	69

1/ From table 56 of Farm-Retail Price Spreads for Food Products, Misc. Pub. No.741, U.S. Dept. Agr. Nov.1957. Sources of data and methods of calculation are described on pages 82 and 83 of that publication. 2/ Payments to farmers for butterfat used in making one pound of butter. 3/ Not adjusted for Government payments to farmers in 1943-46 and to processors in 1943-45.

Table 2.--Retail and wholesale prices of butter, farm values, and marketing spreads, 1947-57 1/

Year	Retail price per pound 2/	Wholesale price per pound 3/	Farm value 4/	Margin (farm-retail spread)	Wholesale-retail spread	Farm-wholesale spread	Farm value as a percentage of retail price
	Cents	Cents	Cents	Cents	Cents	Cents	Percent
1947	80.0	70.6	61.0	19.0	9.4	9.6	76
1948	86.2	75.2	64.9	21.3	11.0	10.3	75
1949	72.1	61.1	51.9	20.2	11.0	9.2	72
1950	72.3	61.7	52.2	20.1	10.6	9.5	72
1951	81.4	69.2	60.0	21.4	12.2	9.2	74
1952	85.0	72.2	62.6	22.4	12.8	9.6	74
1953	79.0	65.9	56.7	22.3	13.1	9.2	72
1954	72.4	59.7	50.4	22.0	12.7	9.3	70
1955	70.9	57.4	49.2	21.7	13.5	8.2	69
1956	72.1	59.2	51.9	21.2	12.9	8.3	71
1957	74.3	59.6	51.5	22.8	14.7	8.1	69

1/ From table 18 of Farm-Retail Price Spreads for Food Products, Misc. Pub. No. 741, United States Department of Agriculture.

2/ U. S. average.

3/ Chicago, 92-score (Grade A) butter.

4/ A weighted average of payments to farmers for butterfat in farm-separated cream and in milk, equivalent to one pound of butter.

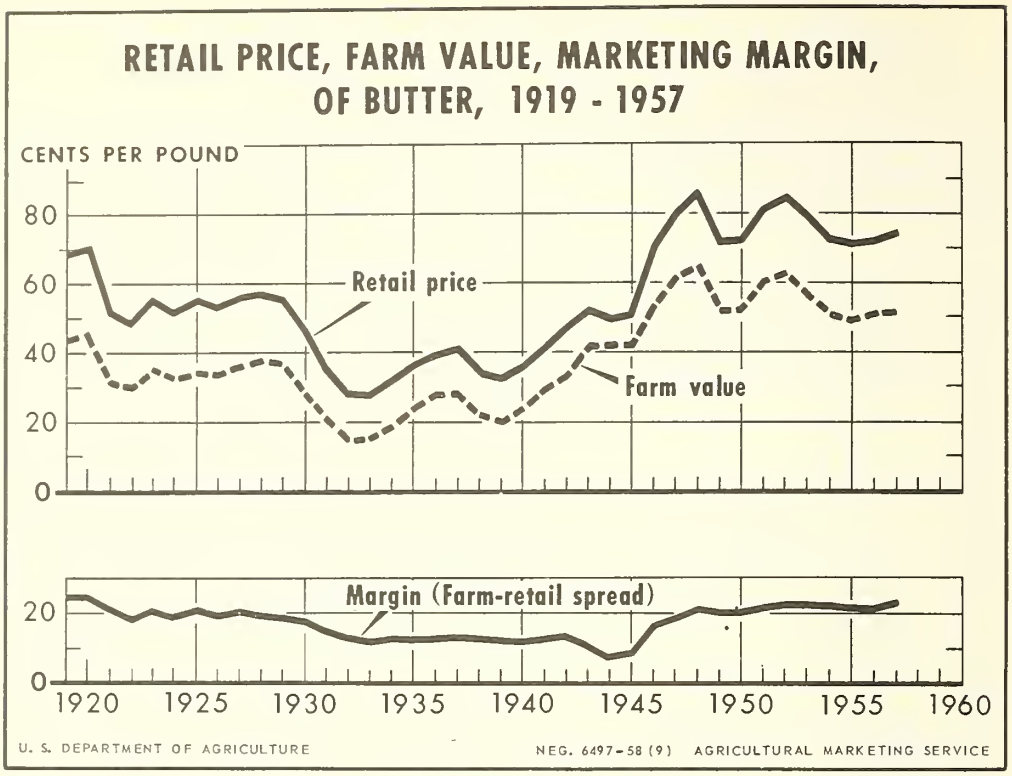

Figure 1

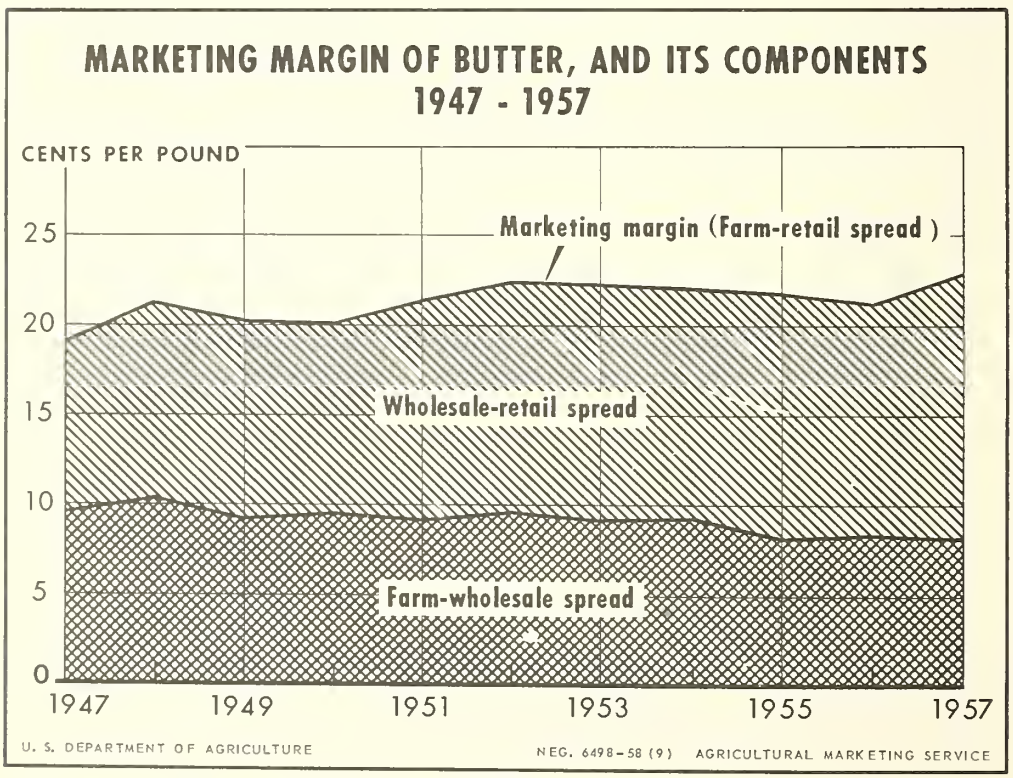

Figure 2

THE CASE STUDIES

The average amount of butter consumed per person in the United States declined from 18.3 pounds in 1926 to 8.5 pounds in 1957. This decline in consumption of butter, on a per capita basis, has focused the attention of farmers and consumers on the marketing process and the costs and services associated with this process. However, because of the extensive changes in the marketing of butter over the years, there is perhaps a greater than ordinary lack of knowledge on the part of the public as to just what steps are involved from the time milk or cream leaves the farm on its way to the creamery to the time the finished product is placed on sale by a retail store or reaches some final destination such as a restaurant or bakery.

It is believed that public understanding of the butter marketing process may be furthered by reporting on observations of some specific shipments of butter. The 10 shipments of butter covered in this report by no means exhaust the variations in the marketing process. They do, however, provide concrete descriptions of the way butter is now marketed and indicate some of the important variations in the marketing process.

In the case of butter, the relative uniformity of the product is likely to lead people to infer that the marketing process is simple and uncomplicated. In most instances, however, the marketing of butter is complex and involves numerous separate agencies each making its own charge for the performance of its services. There may be involved in a single shipment: (1) Haulers of milk or cream from the farm; (2) the creamery which manufactures the butter; (3) a trucker who delivers the butter to a concentration point; (4) a transportation agency (truck or rail) which takes the butter to the wholesale buyer or other first receiver where it is printed and packaged; (5) hauling to a jobber-wholesaler; (6) resale and delivery to a retail outlet; and (7) the retail outlet. The product must also be refrigerated and otherwise protected from quality deterioration at each step of the way.

The reports on these case studies indicate something of the variety of the services which the several marketing agencies are called upon to perform in order to process butter and to move the finished product to the consumer. The reports help to indicate the diversity of the problems involved and something of the uniqueness of each marketing process. In this connection, it must be emphasized that the data showing the marketing margins for these shipments and the parts of these margins taken by the different marketing agencies are not directly comparable with each other. The distinctness of the marketing process and the differences in the services performed preclude close comparison. A few examples will indicate why this is so.

In most instances, producers pay for the cost of hauling cream or milk to the creamery. In one of our case studies, the hauling function is carried out by the creamery and hauling expenses are treated as part of

the operating expenses of the creamery. Field services provided by creameries to patrons vary. Costs of promotional work are sometimes paid by patrons of the creamery, sometimes from general operating expenses of the creamery and in either case, the amounts vary.

The function of consolidating the butter of several creameries may be carried out partly by a hauling agency whose function is to pick up the butter of many creameries and to deliver it to a designated place where another transportation agency or an agent of the buyer takes over. In other cases, consolidation may be carried out entirely by the buyer or by a cooperative association of the creameries involved. In the latter case, the consolidation agency may perform other marketing functions such as selecting the buyer, selecting the means of transportation, and making the collections and disbursements related to sales of butter. The buyer or first receiver of the butter usually carries out the functions of printing and packaging. But in some cases these functions are either not required (e. g. where butter goes to bakeries) or are performed by another firm.

Because the case studies were not made with a view of comparing efficiencies or for evaluating the fairness of margins, no effort was made to obtain data more precise than those which representatives of the marketing agencies voluntarily made available. Nor was any attempt made to verify these data beyond the fact that certain data such as transportation charges or selling and buying prices were often reported by both buyer and seller so that consistency in such cases was looked for as a matter of course. Credit and service policies of the marketing agencies were not examined in any detail in this study.

HOW BUTTER IS MARKETED

Before considering each of the shipments of butter, it is well to take an overall look at the marketing process based on a composite of observations of the 10 shipments. This will enable us to get a better grasp of the kinds of services which are performed by each of the agencies which may be required to help in the marketing of butter. These agencies, in the order in which they participate in the marketing process are: (1) The hauler; (2) the creamery; (3) the consolidation agency; (4) the transportation agency; (5) the first receiver; (6) the jobber; and (7) the retailer. In some cases, the functions of more than one type of agency are combined in a single agency.

The return to producers and the prices paid per pound of butter by the various marketing agencies concerned with each of the 10 shipments are shown in tables 3 and 4. The charges for transportation and other services and the margins of these agencies are shown in tables 5 and 6. (See also figures 3 and 4.)

Table 3.--Returns to producers and prices paid per pound by marketing agencies with respect to shipments of butter from creameries in Minnesota: 1956

Agency	Returns to producers and prices paid 1/						
	Ship. 1 to Phila.	Ship. 2 to Minneap.	Ship. 3A to New York	Ship. 3B: to Phila.	Ship. 4 to Wash.,D.C.	Ship. 5 to Jersey C.	Ship. 6 (destination not known)
	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Producers	51.19	51.19	51.17	51.17	49.77	50.77	51.75
Creamery	53.68	53.68	53.65	53.65	52.26	54.08	54.44
First receiver	59.75	3/	58.75	58.75	59.75	60.00	59.84
Wholesaler (not first receiver)	---	---	62.50	---	7/	---	---
Jobber (or chainstore)	60.25	---	63.50	6/63.00	65.75	---	---
Retailer	62.75	62.00	65.25	---	---	9/	10/
Consumer	2/71.00	4/65.00	5/69.00	5/69.00	8/72.00	---	---

1/ Footnotes to the summaries of charges and margins for the individual shipments provide further explanations of certain data in this table.
2/ Pound solids in wax outerwrap.
3/ This shipment went directly from creamery to a retail store.
4/ Pound solids in cartons.
5/ Quarters in half-pound wrapping (35 cents for single half).
6/ Chainstore warehouse.
7/ Distribution in Washington, D. C. area handled by a local office of the first receiver.
8/ Chainstores (quarters in pound cartons).
9/ Butter used in bakery products sold through the retail stores of the chainstore first receiver.
10/ Butter was printed and packaged at St. Paul by the first receiver, but could not be followed through later stages of marketing.

Table 4.--Returns to producers and prices paid per pound by marketing agencies with respect to shipments of butter from creameries in Iowa: 1956

Agency	Returns to producers and prices paid 1/						
	Ship. 7A to Detroit	Ship. 7B to Detroit	Ship. 8 to Jersey C.	Ship. 9 to New York	Ship. 10A-1 to New York	Ship. 10A-2 to New York	Ship. 10B to New York
	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Producers	53.90	53.90	51.50	50.07	48.17	48.17	48.17
Creamery	55.98	55.98	54.66	53.60	48.98	48.98	48.98
First receiver	58.02	58.02	60.00	59.25	57.75	57.75	57.75
Wholesaler (not first receiver)	---	---	---	---	---	---	---
Jobber (or chainstore)	62.25	61.00	---	6/60.00	59.00	59.00	60.00
Retailer	2/67.00	3/63.25	---	---	8/64.75	62.75	10/61.75
Consumer	---	4/75.00	5/67.00	7/69.00	---	9/70.00	---

1/ Footnotes to the summaries of charges and margins for the individual shipments provide further explanations of certain data in this table.
2/ Restaurants and hotels.
3/ Milk distributors.
4/ Home delivered (quarters in pound cartons).
5/ Retail outlets of first receiver (pound solids in wax overwrap).
6/ Chainstore organizations which do own printing and packaging.
7/ Quarters in pound cartons.
8/ Restaurants.
9/ Grade B butter (pound solids).
10/ Bakeries.

Table 5.--Charges and margins of marketing agencies with respect to shipments of butter from creameries in Minnesota: 1956

Nature of charge or marketing margin	Charges and margins per pound 1/						
	Ship. 1 to Phila.	Ship. 2 to Minneap.	Ship. 3A to New York	Ship. 3B to Phila.	Ship. 4 to Wash. D.C.	Ship. 5 to Jersey C.	Ship. 6 (destination not known)
	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Hauling and other charges paid by producers	2.49	2.49	2.48	2.48	2.49	3.31	2.69
Creamery's margin	3.81	8.32	4.37	4.37	5.42	3.82	3.19
Consolidation charges	0.43	2/	0.18	0.18	0.15	0.24	0.34
Transportation charges	1.83	0.82	1.88	2.22	1.92	1.86	1.87
First receiver's margin	0.50	---	2.42	2.58	4/6.00	---	---
Other wholesaler's margin	---	---	1.00	---	---	---	---
Jobber's margin	2.50	---	1.75	---	---	---	---
Retailer's margin	8.25	2.18	3.75	3/6.00	6.25	---	---
Total marketing margin	19.81	13.81	17.83	17.83	22.23	5/	6/

1/ Footnotes to the summaries of charges and margins for the individual shipments provide further explanations of certain data in this table.

2/ This shipment went directly from the creamery to a retail store.

3/ Combined wholesale-retail margin by chainstore organization.

4/ Includes margin for branch wholesale operation in Washington, D. C.

5/ Butter used in bakery products sold through retail stores of the chainstore first receiver.

6/ Butter was printed and packaged at St. Paul by the first receiver, but could not be followed through later stages of marketing.

Table 6.--Charges and margins of marketing agencies with respect to shipments of butter from creameries in Iowa: 1956

Nature of charge or marketing margin	Charges and margins per pound 1/						
	Ship. 7A to Detroit	Ship. 7B to Detroit	Ship. 8 to Jersey C.	Ship. 9 to New York	Ship. 10A-1 to New York	Ship. 10A-2 to New York	Ship. 10B to New York
	Cents	Cents	Cents	Cents	Cents	Cents	Cents
Hauling and other charges paid by producers	2.08	2.08	3.16	3.53	0.81	0.81	0.81
Creamery's margin	1.87	1.87	3.37	3.35	6.56	6.56	6.56
Consolidation charges	---	---	0.12	---	---	---	---
Transportation charges	1.26	1.26	1.85	5/2.30	5/2.21	5/2.21	5/2.21
First receiver's margin	4.23	2.98	---	0.75	7/4.25	7/2.50	2.25
Other wholesaler's margin	---	---	---	---	---	---	---
Jobber's margin	3.66	1.16	---	---	2.75	2.50	1.75
Retailer's margin	2/	3/11.75	4/7.00	6/9.00	2/	7.25	8/
Total marketing margin	13.10	21.10	15.50	18.93	16.58	21.83	13.58

1/ Footnotes to the summaries of charges and margins for the individual shipments provide further explanations of certain data in this table.
2/ Butter served in restaurants.
3/ Butter sold on home delivery routes of milk distributors.
4/ Combined first receiver and retail margin.
5/ Combined charges for consolidation and transportation.
6/ Combined wholesale-retail margin of chainstores which print and package butter.
7/ Includes charges for printing and packaging by outside firm.
8/ Butter used by bakeries.

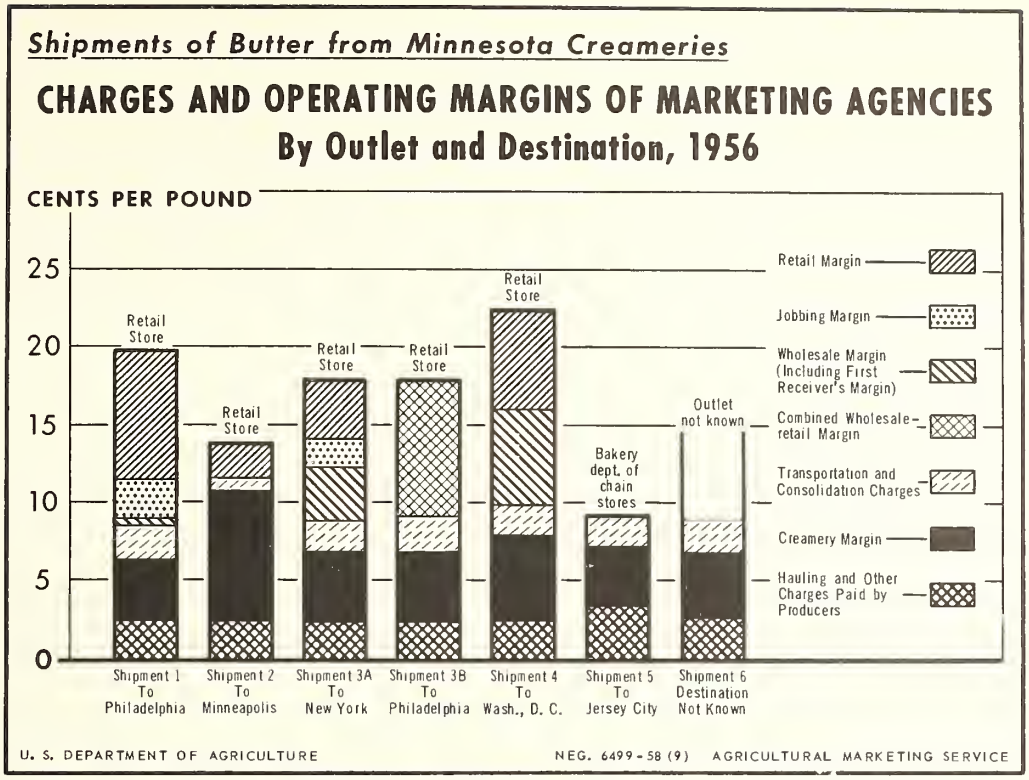

Figure 3

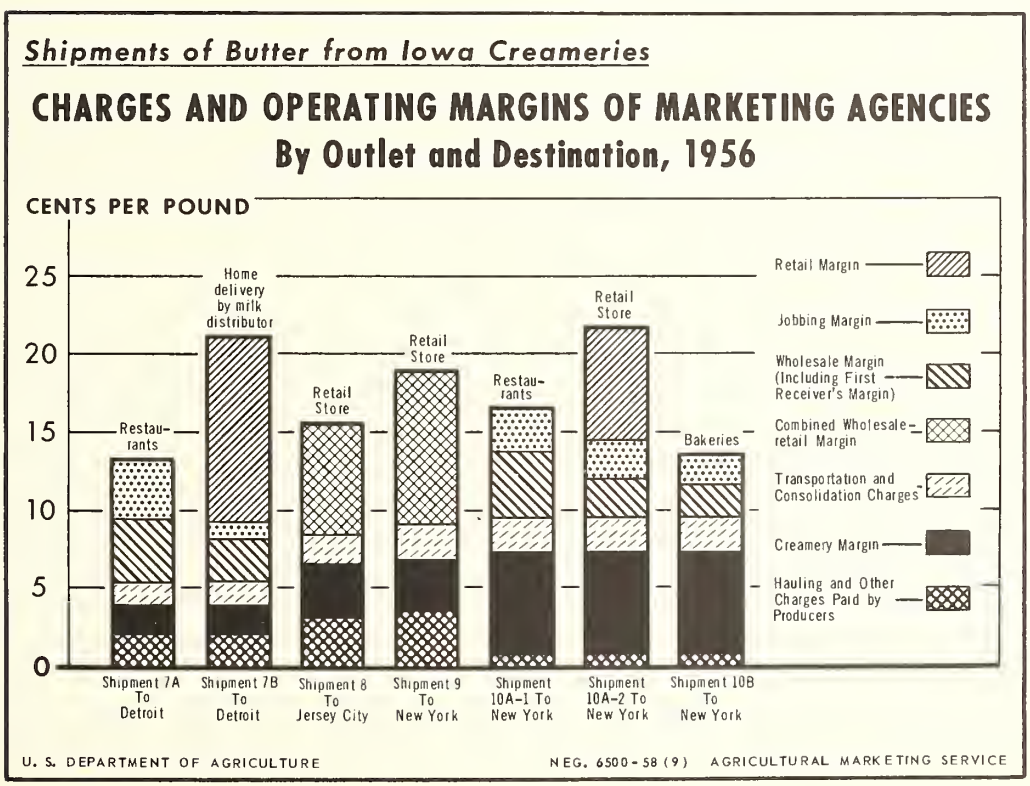

Figure 4

Hauler

The first step in the marketing process is the picking up of the raw material at the farms and delivering it to the creamery. Of the 10 creameries included in the study, 2 received cream only and 8 received both milk and cream. Of these 8, 3 received substantial proportions of butterfat in both forms; the patrons of the other 5 creameries were predominantly whole milk shippers. At the time of the survey, the numbers of patrons supplying the creameries ranged from 89 to 385.

The greater part of the milk and cream deliveries was made by private haulers who owned their own trucks. In most cases, some milk or cream was delivered by patrons, usually one patron bringing in his own milk or cream and the milk or cream of several of his neighbors. In two cases, the creamery owned the trailers in which the milk and cream were hauled by private haulers, the latter owning the tractor only. In one case, the creamery owned all the hauling equipment used. The number of haulers serving the creameries ranged from 2 to 5, 3 being most common. The farms of patrons usually were within a radius of 10 or 20 miles of the creamery.

Milk was picked up daily. Cream was usually picked up 2 or 3 times a week, the frequency of pickups in most cases being greater in the summer. Charges for hauling milk were based on a rate per 100 pounds. Charges for cream were usually on the basis of the pounds of butterfat. The general practice is for patrons to pay the hauling charge through a deduction from their checks which is made by the creamery. In the one case where the creamery operated its own trucks, no charge was made to patrons for this service. The expenses of hauling were treated as part of the general operating expenses of the creamery. In addition to their function of bringing milk and cream to the creamery, haulers, whose income depended upon their volume of business, acted as solicitors for the creamery in getting new patrons and in retaining old ones along their routes.

Creamery

The chief functions of the creamery are to make butter and to prepare it for shipment in bulk. In the cases studied, these bulk shipments were made in fiber boxes, the most common size used holding 60 pounds of butter. The creamery's relation to its farmer patrons is close, however, and it performs a number of services for them which facilitate the marketing process. All but one of the creameries studied were organized as producer owned cooperatives. The other creamery had been organized many years previously as a joint stock company by farmers and businessmen interested in assuring an outlet for milk producers in the area. This creamery operated on a nonprofit basis.

Among the operations related to the making of butter are: (1) Receiving, weighing, and testing the milk and cream for quality and butterfat

content; (2) separating the milk and preparing the cream for churning; (3) churning; (4) packing the butter for shipment; and (5) holding it under refrigeration until it leaves the creamery. Butter from the creameries studied was picked up once or twice a week.

The raw material for the production of butter is cream which commonly contains from 25 to 35 percent butterfat by weight. The finished product contains a minimum of 80 percent of butterfat by weight. Some butterfat is inevitably lost in the process of making butter. The excess weight of butter produced over the pounds of butterfat in cream or milk which the creamery has credited to its patrons is considered as "overrun" by the creameries. The reported overrun over credited receipts of butterfat from producers is in most cases close to 24 percent.

Nine of the 10 creameries paid for milk or cream received on the basis of grade or quality. The tenth creamery which paid for cream on the basis of grade, paid one price for all milk received. This creamery, shortly before the survey in June 1956, had notified its patrons that it would pay by grade beginning the following October. The designations based on inspection and tests of the cream and milk were uniform among the creameries: Cream was paid for as sweet cream, No. 1 sour cream, or No. 2 sour cream; milk was graded as No. 1, No. 2, or Undergrade. In most cases, the creameries received little or no No. 2 cream or Undergrade milk. Several creameries followed a policy of not using cream or milk of these grades in their buttermaking operations.

Three of the creameries belonged to cooperative sales associations which purchased their butter and arranged for its resale. Prices, by grade, were announced each month by the associations. Excess of receipts over expenses and reserves withheld during the year were paid to member creameries in the form of dividends based on volume of shipments. The seven creameries who sold to private firms were paid on the basis of a Chicago or New York market quotation for the grade of butter usually marketed by the creamery. In most cases a premium was paid for extra quality and a penalty was imposed for any butter below the usual grade. The period of the quotation used as a basis for pricing varied in different cases. Weighing and testing of the butter was done (or arranged for) by the buyer. To allow for evaporation of moisture in shipment or possible errors which they might make in weighing, the creameries follow a practice of adding several ounces, commonly 4 to 6, to each box of butter.

Assistance to patrons in maintaining and improving quality of cream and milk was provided by 9 of the 10 creameries. In 6 cases, the work was carried out by fieldmen employed by a broader cooperative association of which the creamery was a member. The latter association was either the sales agency, a cooperative drying plant or a cooperative organized by creameries for the specific purpose of improving the quality of milk produced in the area.

All of the creameries acted as agents for their members in the purchase of feeds, fertilizer, and common supplies, such as soap powders, filters, strainers, cans, and sprays. Some helped in the purchase of larger items of equipment such as coolers. All sold butter to patrons, and most sold other dairy items, such as cheese, ice cream, and skim powder.

Three of the creameries made payments to the American Dairy Association for general promotional work, out of their operating funds. Others deducted amounts for such purposes from payments to patrons. A number of creameries arranged for group hospitalization for patrons and their families with dues deducted from payments of those who wished such coverage.

All of the creameries which received whole milk from patrons disposed of the extra skim milk to nearby drying plants. In most cases these drying plants were cooperatively owned by the creameries using the facilities. Four of the creameries also sold buttermilk, a byproduct of buttermaking, to drying plants. The other 6 creameries disposed of all of their buttermilk to patrons, primarily for use as feed.

All of the creameries printed and packaged a part (5 to 15 percent) of their butter for sales to patrons and to people in the community. Sales to patrons were made from the plants, usually at the wholesale price plus an allowance for costs of printing and packaging. Most of the local sales were made through retail outlets and netted a higher return to the creamery.

Consolidator

The consolidation of butter from a number of creameries preparatory to shipment to the buyer is a necessary part of the marketing process, except in those cases where the buyer is located close to the creamery, or where the capacity of the creamery is very large. The purpose of consolidation is to avoid the extra cost of moving bulk butter when it is transported at less-than-carload rates. A week's output of butter by a creamery of moderate capacity is not sufficient to make a carload. The consolidator by bringing together the outputs of many creameries at a strategic point, such as a rail siding or a truck depot, makes it possible to move bulk butter from the creameries to the plant of the buyer at the lowest unit cost.

The simplest form of consolidation is where a local driver loads the butter from a number of creameries into a refrigerated trailer and, when he has a carload, delivers the trailer to a station of an interstate trucking firm and exchanges it for an empty trailer. Where the main haul is carried out by rail, the consolidator must unload the butter from his truck at the siding and place it in the railroad car.

Several of the shipments in this study were consolidated by cooperative associations to which the creameries belonged. In one case, the association not only assembled the butter for shipment, but also acted as agent for its member creameries in negotiating sales contracts with buyers, made

collections on sales, and after making appropriate deductions for consolidation and transportation, returned the proceeds to the creameries. In two cases, the buyer maintained warehouses at railroad sidings for purposes of helping in consolidating shipments of butter. The butter was weighed at the siding and, where it might be advantageous to the buyer, the butter could be stored temporarily prior to shipment.

Transportation Agency

The movement of butter from the consolidation point to the consuming center is usually made in carload lots by rail or truck. This movement may be in two parts if the printing and packaging facilities of the buyer are located at some point between. In such a case, the second part of the movement to the consuming center involves the transportation of printed butter rather than butter in bulk form. In-transit privileges permit the unloading of bulk butter and reloading of printed butter without increasing the cost of transportation. The refrigerated railroad cars or trucks may also be used as a storage facility for short periods at either end of the line. In shipment 4, for example, the wholesale distributor in Washington, D. C., used a railroad car for this purpose over a period of several days in making deliveries to his customers.

First Receiver

The buyer of the butter from the creamery is designated as the "first receiver" to distinguish such a buyer from other firms which may buy and sell the butter at later stages of the marketing process. Four types of first receiver are included in our sample: (1) Private wholesaler (four shipments); (2) cooperative sales agency (two shipments); (3) chainstore (two shipments); (4) meatpacker (one shipment); and (5) a retail store (one shipment).

It is the first receiver who usually determines the general character of the marketing process in each case. With the exception of the shipment which went directly to a retail store and which represented only a fraction of the creamery's output, the first receiver determined the general destination not only of the butter from each individual creamery in our sample, but also of the butter of many creameries in the area whose butter was consolidated for shipment.

The services of the first receiver vary depending partly on the nature of the first receiver's operation and the destination of the butter. If the butter is to be sold through retail stores or is to be used in restaurants, the first receiver usually performs the functions of printing and packaging the butter. This is actually a manufacturing operation and represents a continuation of the creamery's operation in this respect. Where the butter is to be used for bakery operations, it is usually sold in bulk in the fiber boxes as packed by the creamery. Even where butter is to go to retail

stores or restaurants it may not be printed by the first receivers. In the case of shipments 9 and 10, for example, the wholesalers did not print or package the butter. In the case of shipment 9 the wholesaler sold to chain-store organizations which did their own printing. In the case of shipment 10, the wholesaler contracted out the function of printing and packaging where required by his jobber customers.

Jobber

The term "jobber" as used here is the wholesaler who functions between the buyer or first receiver of the butter from the creamery and the stores, restaurants, bakeries or other outlets for the butter. The jobber does not print, package, or otherwise alter the product itself. He is a "middleman" in the marketing process.

In some cases a local wholesaler may function between the first receiver and the jobber. The distinction between the wholesaler and the jobber (who is also performing a wholesaling function) is that the jobber sells butter primarily to separate retail outlets while the wholesaler sells primarily either to jobbers or to retail outlets in the aggregate such as chainstore organizations. In some cases the difference between the wholesaler and jobber may be slight.

What services does the jobber perform in the marketing of butter? The specific nature of his services depends upon the nature of his business but essentially it is the jobber's function to give flexibility to the marketing process. The creameries make the butter itself. The first receivers determine the general direction in which the butter will go and usually print and package it, if required. But if the butter is destined for numerous independent outlets, jobbers are necessary to provide the kind of services required by these outlets. Sizes and frequency of orders vary, special requirements for delivery must be met in many instances, credit ratings must be examined, bills collected, complaints acted upon, and frequently special competitive aspects involved in relations with customers must be evaluated. The situation requires a firm with closer day-to-day contacts with customers than the first receiver is usually in a position to provide.

Various types of jobbers handle butter. A few specialize in handling butter or butter and eggs. Some handle a fairly complete line of dairy products perhaps with the addition of eggs and margarine. The line of products handled by some jobbers relates to supplying particular kinds of outlets. Thus some jobbers specialize in supplying restaurants, others in supplying a fairly complete line of products for grocery stores, and others specialize in supplying butter and other ingredients required by bakeries. Numerous poultry and meat wholesalers also handle butter as an accommodation to their customers.

In general, the jobbing of butter is highly competitive. The non-specialized butter jobbers, especially the firms supplying meat and poultry to retail outlets, sometimes feel compelled to handle butter at, or close

to, cost in order to retain customers for their main products. Costs of delivery are likely to be ignored when butter is part of an order for meats or poultry.

The jobber operation is often eliminated where larger chainstores or institutional operations are involved. A large chainstore company may buy directly from the first receiver or may even integrate its butter operations to the point where it is the first buyer of the butter, and allocates it in bulk to its bakery operations (shipment 5) or prints and packages it for the stores of its chain (shipment 8).

Retail Outlet

Most of the butter in the shipments studied was sold to consumers through grocery or other retail stores. In some cases (e. g., shipments 7 and 10) substantial portions were used as patties by restaurants. All of shipment 5 and part of shipment 10 were used in bulk form by bakeries. Some butter (e. g., shipment 1) was used by institutions such as hospitals, and installations of the armed forces. Part of shipment 7 was sold to consumers from home delivery routes of milk distributors.

Margins of retail food stores are subject to wide variations. Butter, or particular brands, are sometimes used as "loss leaders" to attract people to shop in the stores. Also, stores usually handle more than one brand of butter and may not handle them at the same margin. Smaller or specialty types of retail food stores are likely to require larger margins than stores handling greater volumes of food.

TEN BUTTER SHIPMENTS

Ten shipments of butter are described in this report. These shipments were chosen more or less randomly from shipments made in mid-1956 by 10 previously selected creameries in Minnesota and Iowa. The shipments were followed through the various marketing stages through field investigations carried out in the latter months of 1956 and the first half of 1957. To provide a frame of reference, monthly retail prices, farm values, and marketing margins for the United States in 1956 are presented in table 7. These creameries were selected as fairly representative of creameries of moderate size. Their receipts of butterfat from producers were within, or close to, a range of from 350,000 to 650,000 pounds annually. Some attention was given to including creameries with different types of buyers so that among the shipments are at least 1 going to each of the following kinds of first receivers: Wholesaler, central cooperative sales agency, chainstore buyer and meat packer. Several different geographic destinations were assured also by selecting creameries which sold butter to first receivers supplying a number of different markets.

Table 7.--Retail price, farm value, marketing margin, and farmer's share of retail price of butter, by months, 1956 1/

Month	Retail price per pound	Farm value	Margin (farm-retail spread)	Farmer's share
	Cents	Cents	Cents	Percent
January	70.9	49.9	21.0	70
February	70.8	50.2	20.6	71
March	70.8	49.7	21.1	70
April	70.7	50.4	20.3	71
May	71.7	50.8	20.9	71
June	71.9	50.8	21.1	71
July	71.9	50.9	21.0	71
August	72.0	50.9	21.1	71
September	72.3	51.2	21.1	71
October	73.4	51.7	21.7	70
November	74.5	53.0	21.5	71
December	74.8	52.4	22.4	70
Average	72.1	51.0	21.1	71

1/ The sources and methods of computation of data in this table are the same as those used in table 1.

The selected creameries were visited during the late summer and fall of 1956. The plant managers or other officers of the creameries were interviewed and detailed information was gathered with respect to: (1) Operations of the plant; (2) its assembly of milk and cream from patrons; (3) prices paid for butterfat; and (4) marketing procedures. A specific shipment of butter was then selected from among those leaving the plant during June or July 1956, and information regarding its identity noted for a followup in later stages of the marketing process. The price and other terms of sale, as well as the concentration and transportation agencies (in some cases a single agency for both functions), were also learned from the respondent at the creamery.

From this point on, each shipment was followed through as far as possible by personal interviews with representatives of the agencies, such as buyers and jobbers, who were in a position to provide information as to how the butter was handled and the charges involved. Because of differences in the marketing process and in the way in which firms kept records for the butter which had been received from each of the creameries which supplied them, there was considerable variation in just how far it was feasible to

follow each shipment through the marketing process. When the identity of the butter in the shipment under observation was lost in a composite lot, an effort was made to follow through by observing what happened to a sample from that lot.

In several instances, the shipment chosen at the creamery was reported by the buyers to have been sold to the Government. In each of these cases, the buyer was able to help in substituting another shipment from the same creamery which had gone through normal commercial channels. In one case, the information from the creamery was not sufficiently complete to enable a followup of a shipment. In another case, the first receiver failed to supply the information necessary to follow the butter further in the marketing process. One creamery sold to two buyers in different cities.

Shipment One

This shipment comprised 7,750 pounds of Grade A butter which left a creamery in Minnesota on June 1, 1956. The raw material for this butter was produced by 218 farmers in an area slightly east and south of central Minnesota. About four-fifths of the butterfat was sent to the creamery in whole milk, the other fifth was supplied in cream.

The creamery paid its farmer patrons 67 cents a pound for butterfat delivered in No. 1 milk or in sweet cream. Price differentials were: Three percent and 6 percent for butterfat in No. 2 and Undergrade milk; and 3 cents and 6 cents for butterfat in No. 1 sour cream and No. 2 sour cream. Considering the proportions of all grades of milk and cream delivered to this creamery, the weighted average price paid to its farmer patrons for butterfat used in making the butter under observation, is estimated at 66.56 cents a pound. Allowing for a 24 percent overrun, the gross paying price for a quantity of butterfat used in making a pound of butter in this shipment was 53.68 cents. The hauling charge to producers for butterfat in cream was 3 cents a pound plus a 3 percent tax. There were no other charges or payments required from farmer patrons. Applying the overrun factor to this hauling expense and subtracting this from the gross paying price, the net return to producers for an amount of butterfat used in making a pound of butter in this shipment was 51.19 cents.

The buyer of this butter is a wholesaler whose place of business is in Philadelphia. The butter was transported by truck in fiber boxes, holding 60 pounds each, to Minneapolis for consolidation at a railroad siding where storage and cooling facilities are maintained by the buyer. Here the butter from about 20 creameries is brought together. The shipment under observation (7,750 pounds) became part of a total carload of 49,636 pounds. In accordance with the usual practice with respect to butter not destined for Government purchase or other special handling, this butter was moved directly from the truck which picked it up at the creamery to a waiting refrigerator car on the siding. The carload left Minneapolis by rail for Philadelphia on June 1, the same day the shipment under observation left the creamery.

The gross price paid by the buyer was 59.75 cents a pound. The following charges per pound were paid by the creamery: (1) 0.33 cent for trucking from the creamery to Minneapolis; (2) 1.83 cents for rail transportation from Minneapolis to Philadelphia; and (3) 0.10 cent charged by the buyer for handling at Minneapolis. The total of these charges paid by the creamery amounts to 2.26 cents a pound. Subtracting this amount from the gross price of 59.75 cents, leaves a net return to the creamery of 57.49 cents a pound for this particular shipment. The difference between 57.49 cents and 53.68 cents, the amount paid by the creamery for the butterfat used in making a pound of butter, is 3.81 cents. This is the part of the marketing margin with respect to this shipment of butter which is represented by the creamery operation.

The refrigerator car with the shipment under observation arrived at the railroad siding outside the Philadelphia headquarters of the buyer on the third of June. The entire carload was unloaded and the shipments from each creamery were separated for grading and placed in a cooling room preparatory to printing and packaging.

From this point it was not possible to identify the movement of each box of butter in the shipment because butter of the same grade from different creameries became undifferentiated from the standpoint of their uses to the wholesaler. The alternative ways of printing Grade A butter by the wholesaler were: (1) Patties of various sizes for restaurant, hotel and institutional trade; (2) quarter pound prints; or (3) pound solids. The quarters and pound solids were protected by parchment wrappers. The quarters were put in half or full pound cartons or in waxed overwraps. The pound solids were sold in waxed overwraps without cartons.

After printing and packaging, the butter was again chilled prior to leaving the wholesaler's plant, either in customers' trucks or in trucks owned by the wholesaler. Most of the customers were jobbers within a 50 mile radius of the city of Philadelphia although some butter went to points beyond this distance in New Jersey and Delaware and at times as far as Baltimore and Washington. In addition to jobber customers, the wholesaler sells some butter directly to institutions and to installations of the armed forces.

This wholesaler operates on close to a half cent average margin 3/ (exclusive of wrapper and carton costs and exclusive of delivery costs). The usual range in the margin is from one-fourth to three-fourths of a cent, the margin tending to vary inversely with the size of the customer's orders and with the distance of the customer from Philadelphia, if beyond about 50 miles of the city. This practice of operating on closer margins in selling butter to customers more than 50 miles outside of Philadelphia was required to compete with wholesale dealers outside of Philadelphia who had the advantage of lower delivery costs.

3/ The term "margin" as applied to a marketing agency in this report is the difference between the agency's selling price and its cost (including transportation charges).

The butter operations of the jobber customers of the wholesaler were generally conducted with margins of from two to three cents. There were, however, some jobbers who handled butter with lower margins as a convenience item for their meat or poultry customers.

Summary of Charges and Margins for Shipment One

		Cents per pound	
1.	Return to producer		51.19
2.	Hauling charge (farm to creamery) 1/	2.49	
3.	Price paid by creamery		53.68
4.	Creamery's margin	3.81	
5.	Consolidation charge (Minneapolis) 1/	0.43	
6.	Transportation charge (to Philadelphia 1/)	1.83	
7.	Price paid by first receiver		59.75
8.	First receiver's margin 2/	0.50	
9.	Price paid by jobber 2/		60.25
10.	Jobber's margin	2.50	
11.	Price paid by retail stores 2/		62.75
12.	Retail store's margin	8.25	
13.	Price paid by consumer 3/		71.00

1/ Tax included.

2/ Approximate average for pound solids in wax outer wrapper. Add 1.5 cents for quarters in cartons.

3/ Estimated average price for pound solids based on average price (72.2 cents) of Grade A salt butter in all forms reported by the Bureau of Labor Statistics for July 1956 in Philadelphia. This estimate can be only a rough approximation of the actual average retail price for this part of the particular shipment.

Shipment Two

This shipment was made up of 250 pounds of Grade A butter produced by the same creamery in Minnesota from which shipment 1 originated. It left the creamery on June 5, 1956. The same data with respect to proportions of milk and cream delivered by producers, rates of payment, and hauling charges apply. As in the previous case, the gross paying price for a quantity of butterfat used in making each pound of butter was 53.68 cents and the net return to producers was 51.19 cents.

The buyer of this butter was a large retail grocery store in Minneapolis. The butter was printed at the creamery in solid pounds and was wrapped and packaged in cartons prior to shipment. It was transported by a private

trucking firm and was delivered at the receiving platform of the store on the following morning. It was there unloaded and a portion was placed in a self-service refrigerator in the store. The remainder was placed in reserve in a refrigerated storage room.

The price paid by the buyer was 62 cents a pound f. o. b. the creamery. This price included payment to the creamery for services of printing, wrapping and packaging. The cost of transportation from the creamery to the store, amounting to 0.82 cent a pound, was paid by the buyer. This was one of four brands of butter currently being sold by this store, with margins ranging from 0 to 10 cents. The retail price charged by the store for the butter under observation was 65 cents, which left the store with a margin of 2.18 cents after paying for transportation.

Summary of Charges and Margins for Shipment Two

		Cents per pound	
1.	Return to producer		51.19
2.	Hauling charge (farm to creamery) 1/	2.49	
3.	Price paid by creamery		53.68
4.	Creamery's margin 2/	8.32	
5.	Price paid by buyer (retail store)		62.00
6.	Retail store's margin	2.18	
7.	Transportation charge (to Minneapolis 1/)	0.82	
8.	Price paid by consumer		65.00

1/ Tax included.
2/ Butter printed, wrapped, and packaged in cartons by creamery.

Shipment Three

This shipment of 12,480 pounds of Grade A butter left a creamery in Minnesota on June 14, 1956. The raw material for this butter was produced by 89 farmers in the southeastern part of the State. About 85 percent of the butterfat was delivered to the creamery in whole milk and 15 percent in cream.

The creamery paid its farmer patrons 67 cents a pound for butterfat delivered either in No. 1 milk or in sweet cream. Price differentials were 3 percent and 6 percent for butterfat in No. 2 and Undergrade milk, and 3 cents and 6 cents for butterfat in No. 1 sour cream and No. 2 sour cream. Based on the proportions of butterfat in the several grades of milk and cream delivered to the creamery, the weighted average price paid to its farmer patrons for butterfat used in making the butter in this shipment was 66.52 cents a pound. Allowing for a 24 percent overrun, the gross paying price for a quantity of butterfat used in making a pound of butter was

53.65 cents. Producers paid hauling charges based on rates per hundred pounds of milk or cream delivered. Based on the 60-cent rate charged for cream (which in practice contained an average of 24 percent butterfat) the estimated hauling expense to producers per pound of butterfat amounted to 2.58 cents, including the 3 percent transportation tax. The creamery also deducted a half cent for each pound of butterfat delivered by producers for support of the activities of the American Dairy Association. Applying the overrun factor to the hauling expense and to the deductions for ADA and subtracting from the gross paying price, the net return to producers for an amount of butterfat used in making a pound of butter in this shipment was 51.17 cents.

The first receiver of this butter is a wholesaler whose place of business is in Chicago. The butter was taken by truck in 208 fiber boxes, holding 60 pounds each, for consolidation at Rochester, Minnesota. The consolidation function was carried out by a cooperative association with 17 creamery members. This association acts also as a sales agency for member creameries. A driver and helper, employed by the association, loaded the trailer with butter from a number of member creameries (including the shipment under observation) and brought it to the Rochester headquarters of the trucking firm to which the trailer belonged. On arrival the next morning, June 15, it was exchanged for an empty trailer. The full trailer was then taken by a driver employed by the trucking firm to the buyer in Chicago.

The gross price paid by the buyer was 58.75 cents a pound. The following charges per pound were paid by the creamery: (1) 0.18 cent for consolidating the butter at Rochester, including 0.02 cent for maintenance of the association which consolidates and sells the butter; and (2) 0.55 cent for truck transportation from Rochester to Chicago. The total of these charges paid by the creamery amounted to 0.73 cent a pound. Subtracting this amount from the gross price of 58.75 cents a pound, we find that the net return to the creamery was 58.02 cents a pound for this particular shipment. The difference between 58.02 cents and 53.65 cents, the amount paid by the creamery for the butterfat used in making a pound of butter, is 4.37 cents. This is the part of the marketing margin with respect to this shipment of butter which is represented by the creamery operation.

The refrigerated trailer in which the shipment was carried arrived at the plant of the buyer in Chicago on June 15, the same day it left Rochester. The entire carload was unloaded and the shipments from each creamery were graded and placed in a cooling room for conditioning prior to printing and packaging. Five days later, June 20, 65 of the 208 60-pound boxes in the shipment were taken from the cooling room and were printed and packaged. On the following day, the remaining 143 60-pound boxes were taken from the cooling room and were printed and packaged. The entire shipment was printed in quarters and was packaged in half pounds, known in the trade as "twins." The bulk of this butter, 11,774 pounds, was sold to a New York City wholesale butter branch of a dairy organization, nationwide in scope. Another 640

pounds were sold to a chainstore organization for delivery in Philadelphia. The remaining 96 pounds of the shipment was accounted for by the first receiver as shrinkage, or loss, in printing.

The 11,774 pounds of butter sold to the New York wholesale branch were packaged in two quarter pound sticks with a wax overwrap on which the name of the national dairy organization as well as the brand name for its butter was printed. It was delivered by truck as part of a load of 24,000 pounds of Grade A butter, printed and packaged in the same way. Delivery was made in 750 boxes, each containing 64 half-pound packages, on June 28. It was taken from the truck and placed in a cooling room to be used in filling future orders. The price paid by the buyer was 62.5 cents a pound. The seller (first receiver) paid the cost of transportation from Chicago to New York which amounted to 1.33 cents a pound. The first receiver's margin for this part of the shipment under observation was 2.42 cents a pound. Although the identity of the particular butter under observation was lost in the warehouse of the New York wholesale branch, butter from the entire carload was sold primarily to wholesale-jobbers and local chainstore buyers in the New York City area. A few boxes were sent to a buyer in Florida. Eight boxes were purchased by a wholesale-jobber for export. The usual markup of the New York wholesaler to its accounts was one cent a pound f. o. b. its own platform. Three-fourths of a cent, and in a very few instances, half-cent markups occurred for large orders with special competitive requirements.

The largest jobber customer supplied retail stores at a 1.75 cents a pound markup from his own paying price. The prevailing retail price for this butter in outlets of local chainstore organizations in mid-August was 35 cents a half-pound and 69 cents for two half-pound packages.

The 640 pounds of butter from the original shipment, which was sold by the first receiver to a chainstore organization, were packaged like the rest of the shipment except that the wax overwrap, in which the two quarters were held together, carried the name of the chainstore company and its brand name. It was delivered by truck in 40 boxes containing 32 half-pound packages as part of a carload of similar butter. It was unloaded from the truck on arrival and stored under refrigeration to be taken out as required for delivery to retail outlets of the chain in the Philadelphia area. The price paid by the buyer was 63 cents a pound. The seller (first receiver) paid the cost of transportation from Chicago to Philadelphia which amounted to 1.67 cents a pound. The first receiver's margin on this part of the shipment was 2.58 cents a pound. This butter was distributed by the company's own stores, at which the prevailing prices were 35 cents a half-pound and 69 cents for two half-pound packages. The margin of the chainstore company from first receiver to consumer was 6 cents a pound when 2 half-pound packages were purchased by consumers and 7 cents a pound when single half-pound packages were purchased.

Summary of Charges and Margins for Shipment Three

		Cents per pound	
1.	Return to producer		51.17
2.	Hauling charge (farm to creamery) 1/	2.08	
3.	Other charges to producer	0.40	
4.	Price paid by creamery		53.65
5.	Creamery's margin	4.37	
6.	Consolidation charge (Rochester, Minn.) 2/	0.18	
7.	Transportation charge (to Chicago) 1/	0.55	
8.	Price paid by first receiver		58.75
9A.	First receiver's margin (A part)	2.42	
10A.	Transportation charge (to New York)	1.33	
11A.	Price paid by buyer (New York wholesaler)		62.50
12A.	New York wholesaler's margin 3/	1.00	
13A.	Price paid by jobbers and chainstores 3/		63.50
14A.	Jobber's margin	1.75	
15A.	Price paid by retail store		65.25
16A.	Retail store's margin 4/	3.75	
17A.	Price paid by consumer 4/		69.00
9B.	First receiver's margin (B part)	2.58	
10B.	Transportation charge (to Philadelphia)	1.67	
11B.	Price paid by buyer (chainstore)		63.00
12B.	Combined wholesale-retail margin 4/	6.00	
13B.	Price paid by consumer 4/		69.00

1/ Tax included.
2/ Includes 0.016 cent a pound for maintenance of association which consolidates and sells the creamery's butter.
3/ Approximate average, f. o. b. sellers' platform.
4/ Add one cent a pound for sales in single half-pound packages.

Shipment Four

This shipment comprised 10,132 pounds of Grade AA butter which left a creamery in Minnesota on June 30, 1956. The raw material for this butter was produced by 123 farmers in the eastern part of the State, operating farms in an area about midway between Duluth and Minneapolis. Ninety-seven percent of the butterfat was delivered to the creamery in whole milk, the other 3 percent was delivered in cream.

The creamery paid its farmer patrons 65 cents a pound for butterfat delivered in No. 1 milk or in sweet cream. Price differentials for No. 2 and Undergrade milk were 3 percent and 6 percent, respectively. All of the cream shippers delivered sweet cream. On the basis of the proportions of butterfat delivered in milk of the several grades and in sweet cream, the weighted average price paid by the creamery to its farmer patrons for butterfat used in making the butter in this shipment, is estimated to be 64.80 cents a pound. Allowing for a 24 percent overrun, the gross paying price for a quantity of butterfat used in making each pound of butter was 52.26 cents. The hauling cost to producers for this quantity of butterfat, estimated from the charge for hauling butterfat in cream, was 2.49 cents, including tax. There were no other charges made to farmer patrons. The creamery made payments to the American Dairy Association as an operating expense. The gross paying price less the cost of hauling was 49.77 cents. This was the net return to producers for an amount of butterfat used in making a pound of butter in this shipment. This net return does not include cash patronage dividends customarily paid after the end of the year. The previous year's dividend had been 0.4 cent a pound of butterfat delivered (0.323 cent for butterfat in a pound of butter).

The buyer, or first receiver, of this butter was a cooperative dairy association of which the creamery was a member. The butter was transported by truck in 158 fiber boxes, containing 64 pounds each, for consolidation at Hinkley, Minn. At Hinkley, this butter and that of other creameries was transferred from trucks to refrigerated railroad cars. The carload, of which this particular shipment was a part, was routed to Washington, D. C., with transit privileges permitting it to be taken off at Duluth for printing and packaging by the buyer.

The gross price paid by the buyer was 59.75 cents a pound. The following charges per pound were paid by the creamery: (1) 0.15 cent for trucking and consolidation at Hinkley; (2) 1.92 cents for rail transportation from Hinkley to Washington, D. C. The total of these charges paid by the creamery is 2.07 cents a pound. The gross price of 59.75 cents less 2.07 is 57.68 cents. This is the net return per pound received by the creamery. The difference between 57.68 and 52.26, the amount paid by the creamery for the butterfat used in making a pound of butter, is 5.42 cents. This is the marketing margin with respect to this shipment of butter which is represented by the creamery operation.

On receipt at Duluth, July 2, the butter was unloaded, graded, and placed under refrigeration in preparation for printing. All of the butter in the shipment under observation was printed and wrapped in quarter pound sticks and packaged in one-pound cartons under the brand name of the cooperative association. Shrinkage in the printing operation was reported to be about two-tenths of one percent. After printing and packaging, the butter was packed in boxes, 32 one-pound cartons to a box. The butter was loaded in a refrigerator car on July 9, as part of a shipment of 22,400 pounds of butter similarly packaged and boxed. It was transported to Washington, D.C., consigned to a branch office of the cooperative association in charge of wholesale distribution in the Washington area.

The car, after arrival at a railroad freight yard in Washington, D. C., remained on a siding for several days, while the butter was being transferred to trucks for delivery directly to customers of the wholesale branch. Six boxes (32 pounds each) were found, on inspection by the receiver, to be damaged. A representative of the railroad examined the contents and found a sufficient number of cartons in good condition to repack them in four new boxes. The railroad retained the other 64 pounds of butter for salvage and compensated the shipper for the loss. Although in this particular case, no warehouse facilities were used, the wholesale representative utilizes rented cold storage facilities in the city to maintain a balance in operations between shipments of incoming butter and customers' requirements. Almost all of this butter was sold to jobbers and chainstore organizations. Delivery in most cases was made by a contract hauler and was paid for by the seller. In the case of chainstore buyers, delivery was made either to the warehouse of the chain organization or to the individual stores in the chain. Rates charged by the contract hauler in July 1956 were 32 cents a hundred pounds for delivery in Washington and 35 cents a hundred pounds for delivery in nearby Virginia and Maryland.

The price charged to jobbers and to chainstores requiring only a single delivery was 65.75 cents a pound. This provided a total margin of 6 cents a pound over the cost of the butter (59.75 cents) to the cooperative association for its printing and packaging operations at Duluth and its wholesale branch operations in Washington, including costs of delivery in the Washington area. Higher prices, and consequently larger margins, were associated with butter sold to chainstores where delivery was made to each store in the chain. The prevailing retail price for this butter in chainstores during the early part of August 1956 was 72 cents a pound.

Summary of Charges and Margins for Shipment Four

		Cents per pound	
1.	Return to producer 1/		49.77
2.	Hauling charge (farm to creamery) 2/	2.49	
3.	Price paid by creamery		52.26
4.	Creamery's margin 3/	5.42	
5.	Consolidation charge (Hinkley) 2/	0.15	
6.	Transportation charge (to Washington, D. C.) 2/	1.92	
7.	Price paid by first receiver		59.75
8.	First receiver's margin 4/	6.00	
9.	Price paid by jobbers and chains 5/		65.75
10.	Chainstore's margin	6.25	
11.	Price paid by consumer 6/		72.00

1/ Does not include a cash dividend which is usually given by creamery to its member-patrons. Previous year's dividend amounted to 0.323 cent for a quantity of butterfat used in making a pound of butter.

2/ Tax included.

3/ Does not include a cash dividend received from cooperative association which buys its butter. Previous year's dividend was 0.8 cent a pound of butter sold. Creamery pays dues to association (0.17 cent a pound on this shipment).

4/ Includes margin for branch wholesale operation in Washington, D. C.

5/ Delivered. Higher price paid by chains requiring delivery to separate stores.

6/ At chainstores.

Shipment Five

This shipment was made up of 3,840 pounds of Grade A butter which left a creamery in Minnesota on June 23, 1956. The raw material for this butter was produced by 171 farm operators located in the south central part of the State. About 87 percent of the butterfat was sent to the creamery in whole milk and the other 13 percent was delivered in cream.

The creamery paid its patrons 68 cents a pound for butterfat delivered in No. 1 milk or in sweet cream. Price differentials were: Three percent and 6 percent for butterfat in No. 2 and Undergrade milk; and 3 cents and 6 cents for butterfat in No. 1 and No. 2 sour cream. Based on the proportions of the several grades of milk and cream actually delivered, the weighted average price paid to the creamery's farmer patrons for butterfat used in making the butter under observation, is estimated to be 67.06 cents a pound. Allowing for a 24 percent overrun, the gross paying price for a quantity of butterfat used in making a pound of butter in this shipment was 54.08 cents. The hauling charge to producers for butterfat in cream was 3.60 cents a pound including tax. A half cent was also deducted from

patrons' checks for support of the American Dairy Association. Applying the overrun factor to each of these charges and subtracting the total from the gross paying price, the net return to producers for an amount of butterfat used in making a pound of butter in this shipment is found to be 50.77 cents.

The buyer of this butter was a chainstore organization which purchased the butter for delivery to Jersey City. The butter was transported by truck in 64 fiber boxes, holding 60 pounds each, for consolidation at Austin, Minnesota. The consolidation operation was carried out by a cooperative association established for this purpose. At Austin, the butter was taken from the truck and loaded on a refrigerated railroad car with butter from other creameries for shipment to Jersey City. It arrived in Jersey City on June 27, four days after leaving the creamery.

The gross price paid by the buyer was 60 cents a pound. The following charges per pound were paid by the creamery: (1) 0.24 cent for consolidation of the butter at Austin; and (2) 1.86 cents for rail transportation from Austin to Jersey City. Subtracting the total of these charges, 2.1 cents per pound, from the gross price of 60 cents, leaves a net return to the creamery of 57.9 cents a pound. The difference between 57.9 cents and 54.08 cents, the amount paid by the creamery for the butterfat used in making a pound of butter, is 3.82 cents. This is the creamery's part of the marketing margin with respect to this shipment of butter.

On arrival in Jersey City, the butter was unloaded and placed in a cooling room for firming. The greater part of butter handled by this branch of the chainstore organization is printed and packaged for distribution to its stores. In the case of the particular shipment of butter under observation, however, it was sent to the bakery division of the organization in the original fiber cartons. Here it was used in making various bakery products sold through the organization's retail stores.

Summary of Charges and Margins for Shipment Five

		Cents per pound	
1.	Return to producer		50.77
2.	Hauling charge (farm to creamery) 1/	2.91	
3.	Other charges to producers 2/	0.40	
4.	Price paid by creamery		54.08
5.	Creamery's margin	3.82	
6.	Consolidation charge (Austin) 1/	0.24	
7.	Transportation charge (Jersey City) 1/	1.86	
8.	Price paid by first receiver		60.00

1/ Tax included.

2/ Payments in support of American Dairy Association.

Shipment Six

This shipment of 12,928 pounds of butter left a creamery in Minnesota on June 5, 1956. Part of this butter, 8,896 pounds, was graded AA by the first receiver and the remaining 4,032 pounds was of A grade. The raw material for this butter was produced by 219 farmers in the southwestern part of the State. About 92 percent of the butterfat was delivered to the creamery by these farmers in whole milk and 8 percent in cream.

The creamery paid its farmer patrons 69 cents a pound for butterfat delivered either in milk of No. 1 quality or in sweet cream. Prices paid for butterfat delivered in No. 2 and Undergrade milk were 3 percent and 6 percent lower. The prices paid for butterfat delivered in No. 1 and No. 2 sour cream were 4 cents and 8 cents less than the price paid for butterfat in sweet cream. No cream was paid for at less than the No. 1 price in June 1956. Based on the proportions of butterfat delivered to the creamery in milk and cream of each grade, the weighted average price paid to its farmer patrons for butterfat used in making the butter in this shipment was estimated to be 67.50 cents a pound. Allowing for a 24 percent overrun, the gross paying price for a quantity of butterfat used in making each pound of butter was 54.44 cents. Producers paid hauling costs amounting to 3 cents a pound of butterfat in cream plus a 3 percent tax. They also made payments to support the work of the American Dairy Association amounting to 1 cent per hundredweight of milk and 0.25 cent per pound butterfat in cream. Taking this latter figure as representative of ADA payments chargeable to the butter operation, adding it to the hauling cost, and applying the overrun factor, we find that producers paid 2.69 cents for these services. Subtracting this from the gross paying price of 54.44 cents, we find that the net return to producers for an amount of butterfat used in making a pound of butter in this shipment was 51.75 cents.

The first receiver of this butter is a meatpacking company with headquarters in Chicago. The butter was taken by refrigerated truck in 202 fiber boxes, holding 60 pounds each, for consolidation at St. Paul, Minn. The butter was picked up and delivered with other butter from creameries in the vicinity by a private trucking firm and was delivered to a branch of the meatpacker in St. Paul where facilities are maintained for the receiving, storing, and printing of butter. The butter arrived at St. Paul on June 5, the same day it left the creamery and was unloaded, graded, and placed in a cooling room preparatory to printing and packaging. It was not possible to follow the marketing of this particular shipment beyond this point because the buyer did not make available the information necessary to do this.

The gross prices paid by the buyer were 60 cents a pound for the 139 boxes (64 pounds each) of Grade AA butter and 59.5 cents a pound for the 63 boxes of Grade A butter. The weighted average of these two prices was 59.84 cents. The following charges per pound were paid by the creamery: (1) 0.34 cent for trucking from the creamery to St. Paul; and (2) 1.87 cents for transportation (based on charge from St. Paul to New York City).

The total of these charges paid by the creamery amounted to 2.21 cents a pound which when subtracted from the gross price of 59.84 cents, gives 57.63 cents, the net return to the creamery. The difference between the net return, 57.63 cents, and 54.44 cents, the amount paid by the creamery for the butterfat used in making a pound of butter, is 3.19 cents. This is the part of the marketing margin with respect to this shipment of butter which is attributed to the creamery operation.

Summary of Charges and Margins for Shipment Six

		Cents per pound	
1.	Return to producer		51.75
2.	Hauling charge (farm to creamery) 1/	2.49	
3.	Other charges 2/	0.20	
4.	Price paid by creamery		54.44
5.	Creamery's margin	3.19	
6.	Consolidation charge (St. Paul) 1/	0.34	
7.	Transportation charge (New York) 1/	1.87	
8.	Price paid by first receiver 3/		59.84

1/ Tax included.
2/ Payments in support of American Dairy Association.
3/ Weighted average: 139 boxes Grade AA at 60 cents a pound and 63 boxes Grade A at 59.5 cents a pound.

Shipment Seven

This shipment which comprised 14,040 pounds of Grade A butter left a creamery in Iowa on June 11, 1956. The raw material for this butter was produced by 152 operators of farms in the northeastern part of the State. All of the butterfat was sent to the creamery in the form of cream, about four-fifths of which was sweet cream and the other fifth was sour cream of No. 1 quality. No cream of less than No. 1 quality was used by the creamery in its butter operations.

The creamery paid its patrons 70 cents a pound for butterfat delivered in sweet cream, and 67 cents for butterfat delivered in No. 1 sour cream. Based on the proportions of the amounts of the 2 grades of cream, the weighted average price paid to the creamery's farmer patrons for butterfat is estimated to be 69.41 cents a pound. Allowing for a 24 percent overrun, the gross paying price for a quantity of butterfat used in making a pound of butter in this shipment was 55.98 cents. The hauling charge paid by producers varied from 2 to 3.5 cents per pound of butterfat; the average was reported to be approximately 2.5 cents. Applying the overrun factor to the hauling cost, and subtracting from the gross paying price, the net return to producers for an amount of butterfat used in making a pound of

butter in this shipment is found to be 53.90 cents. One cent a pound of butterfat delivered was deducted from payments to producers for a revolving fund to help support the creamery operations. Payments from the fund to producers were reported as usually beginning after the fifth year from the time payments were made to the fund.

The butter was marketed through a cooperative sales association of which the creamery was a member. This organization purchased the butter of member creameries and arranged for its resale, in most cases after the butter had been printed and packaged. This particular shipment of butter was transported by truck in 234 fiber boxes, holding 60 pounds each, to the Dubuque, Iowa division of the sales association. It arrived there on June 11, the same day it left the creamery.

The gross price paid by the buyer to the creamery was 58.02 cents a pound. The creamery paid 0.17 cent for the cost of trucking the butter from the creamery to Dubuque. Deducting this from the gross price of 58.02 cents, leaves a net return to the creamery of 57.85 cents a pound. The difference between 57.85 cents and 55.98 cents, the amount paid by the creamery for the butterfat used in making a pound of butter, is 1.87 cents. This is the creamery's part of the marketing margin for this shipment of butter.

On arrival at the plant of the buyer in Dubuque, the butter was unloaded from the truck, graded, and placed in a cooling room for firming. Later, the entire amount was printed, packaged and sold to a jobber in Detroit. It was not all printed and packaged in the same way, however. Of the 14,040 pounds, 6,900 pounds were printed in the form of patties of various sizes, for restaurant use, and were put up in 5-pound packages. The other 7,140 pounds were made into quarter-pound prints and were packaged in one-pound cartons. The cartons were supplied to the first receiver by the jobber, who in turn, had received them from his customers, distributors of milk and other dairy products in the Detroit area. The firm name of each of these distributors was preprinted on the cartons which it supplied.

The price paid by the jobber in Detroit for butter printed in patties was 62.25 cents a pound. The first receiver's margin on this butter was 4.23 cents a pound. The price paid by the jobber for butter printed in quarter-pounds and packaged in one-pound cartons was 61 cents a pound, leaving a margin for the first receiver of 2.98 cents a pound.

The butter was transported from Dubuque to the jobber in Detroit by refrigerated truck. The patties in 5-pound packages were put up in cardboard cases of 6 packages each. The pound cartons were put up in cases of 32 pounds each. On arrival, the butter was unloaded and placed in the refrigerated storage facilities of the jobber. The patties were of four different sizes (48, 60, 72, and 90 to a pound) based on the requirements of the hotels and restaurants supplied by the jobber. Most of the patties were sold under the name of the jobber. A few carried the stamp of the hotel or restaurant, the die for which was in the hands of the first receiver who had printed this butter. The pound cartons were sold to stores and milk

distributors (for delivery on routes), the former carrying the name of the jobber, the latter carrying the name of the milk distributor. Delivery to customers of the jobber, whether of patties or pound cartons, was made by the jobber in his own trucks.

The prices paid by restaurants and hotels for patties, averaged about 67 cents a pound. The prices paid by milk distributors averaged about 63.25 cents a pound. The jobber paid the costs of transportation of butter from Dubuque which amounted to 1.09 cents a pound. This left the jobber a margin of 3.66 cents a pound in the handling of patties and a margin of 1.16 cents a pound in the handling of butter in pound cartons. The home-delivered retail price of this butter at the end of June 1956 was 75 cents a pound.

Summary of Charges and Margins for Shipment Seven

		Cents per pound	
1.	Return to producer 1/		53.90
2.	Hauling charge (farm to creamery) 2/	2.08	
3.	Price paid by creamery		55.98
4.	Creamery's margin 3/	1.87	
5.	Transportation charge (Dubuque) 2/	0.17	
6A.	Price paid by first receiver		58.02
7A.	First receiver's margin (A part)	4.23	
8A.	Price paid by jobber		62.25
9A.	Jobber's margin	3.66	
10A.	Transportation charge (Dubuque to Detroit) 2/	1.09	
11A.	Price paid by restaurants and hotels 4/		67.00
6B.	First receiver's margin (B part)	2.98	
7B.	Price paid by jobber		61.00
8B.	Jobber's margin	1.16	
9B.	Transportation charge (Dubuque to Detroit) 2/	1.09	
10B.	Price paid by milk distributors 5/		63.25
11B.	Milk distributors' margin	11.75	
12B.	Price paid by consumer 6/		75.00

1/ One cent per pound of butterfat is deducted by creamery from payments to producers to maintain a revolving fund. Paybacks to producers from the fund normally start after the fifth year.

2/ Tax included.

3/ Does not include cash patronage refund from cooperative association to which it sells its butter (0.56 cent a pound of butter sold for year ending Feb. 28, 1956).

4/ Prices ranged from 65 to 68 cents based on volume and competitive factors.

5/ Prices ranged from 63 to 63.5 cents.

6/ Home-delivered price last week of June 1956.

Shipment Eight

The 25,928 pounds of Grade A butter in this shipment left a creamery in Iowa on June 8, 1956. The butterfat from which this butter was made was produced by 266 farmers in the northeastern part of the State. Slightly over half of this butterfat was delivered to the creamery in the form of milk, the remainder being delivered in cream.

The creamery paid 68 cents a pound for butterfat delivered in No. 1 milk or in sweet cream. The price per pound of butterfat in No. 1 sour cream or No. 2 milk was 65 cents and the price of butterfat in No. 2 sour cream (of which there was a negligible proportion) was 62 cents. No Undergrade milk was accepted by this creamery. Based on the proportions of butterfat delivered in milk and cream of the several grades, the weighted average price paid by the creamery for butterfat used in making the butter in this shipment was 67.78 cents a pound. Applying the 24 percent overrun factor to this price gives a gross paying price of 54.66 cents for a quantity of butterfat used in making a pound of butter. Producers paid hauling charges which averaged about 3.5 cents a pound of butterfat delivered. They paid also about 0.42 cent a pound of butterfat for support of the American Dairy Association. Applying the overrun factor to these expenses and subtracting from the gross paying price, leaves 51.50 cents. This is the net return to producers for an amount of butterfat used in making a pound of butter in this shipment.

This butter was purchased by a chainstore organization for delivery to its butter division in Jersey City, N. J. The butter, in 463 fiber boxes holding 56 pounds each, was first taken by refrigerated truck for consolidation at Elgin, Iowa with butter from other creameries whose output was purchased by the same buyer. The function of consolidation was carried out by a cooperative association to which these creameries belonged. At Elgin, the butter was unloaded from the truck and loaded in a refrigerated railroad car on the same day it left the creamery. The butter then was transported by rail directly to the butter division of the buyer in Jersey City.

The gross price paid by the buyer was 60 cents a pound. The following charges per pound were paid by the creamery: (1) 0.12 cent for consolidation of the butter at Elgin; and (2) 1.85 cents for transportation from Elgin to Jersey City. The total of these charges is 1.97 cents which when subtracted from the gross price of 60 cents leaves a net return to the creamery of 58.03 cents a pound for butter in this shipment. The difference between 58.03 cents and 54.66 cents, the amount paid by the creamery for the butterfat used in making a pound of butter, is 3.37 cents. This is the part of the marketing margin for this shipment of butter which is represented by the creamery operation.

The butter arrived at the Jersey City plant of the buyer on June 12 and was unloaded from the railroad car, graded and placed under refrigeration in preparation for printing. From this point, the identity of the

butter in this particular shipment was lost as it was handled with butter of the same quality from other creameries. This larger quantity of butter (80,496 pounds) was printed and packaged for distribution through the stores of the chain in the New York metropolitan area. The proportionate amounts in which the butter was printed and packaged were: 58 percent in one pound solids, 23 percent in half-pound packages of two quarter pound prints, and 19 percent in one-pound packages of four quarter pound prints. In each case the butter was packaged in wax overwraps and printed with the brand name used by the buyer for its butter. The loss in printing, or shrinkage, on the entire 80,496 pounds of butter was 768 pounds or about 0.95 percent. Part of the printed butter was delivered directly to stores of the chain by truck. The rest was delivered to warehouses of the chain for later delivery to stores with other merchandise.

The retail prices in the stores of the chain during the period when most of this butter was sold were: (1) 67 cents for pound solids; (2) 69 cents for packages of four quarter pounds; and (3) 35 cents for packages of two quarter pounds. The combined margin of the chainstore organization corresponding to these three different forms were 7 cents a pound; 9 cents a pound; and 10 cents a pound.

Summary of Charges and Margins for Shipment Eight

		Cents per pound	
1.	Return to producers 1/		51.50
2.	Hauling charge (farm to creamery) 2/	2.82	
3.	Other charges to producer 3/	0.34	
4.	Price paid by creamery		54.66
5.	Creamery's margin	3.37	
6.	Consolidation charge (Elgin, Iowa)	0.12	
7.	Transportation charge (Jersey City) 2/	1.85	
8.	Price paid by first receiver		60.00
9.	Combined first receiver and retail margin 4/	7.00	
10.	Retail price 4/		67.00

1/ One cent per pound of butterfat is deducted by creamery from payments to producers to maintain a revolving fund. Producers receive cash paybacks from fund.

2/ Tax included.

3/ Payments in support of American Dairy Association.

4/ For one-pound solids. Add 2 cents for packages of 4 quarters and 3 cents for butter sold in half-pound packages of 2 quarters.

Shipment Nine

This shipment comprised 7,380 pounds of Grade A butter which left a creamery in Iowa on June 21, 1956. The raw material for this butter was produced by 301 farmers in an area slightly north of the central part of the State. About two-fifths of the butterfat was delivered to the creamery in whole milk and the other three-fifths in cream.

The creamery paid its farmers 67 cents a pound for butterfat in milk or sweet cream. Milk was not purchased by the creamery on a grade basis so that all butterfat in milk received by the creamery was paid for at the one price. The creamery paid 64 cents a pound for butterfat received from its patrons in sour cream of No. 1 quality. Sour cream of lower than No. 1 quality was not received by the creamery. The weighted average price paid by the creamery for butterfat used in making the butter under observation, is estimated at 66.46 cents a pound of butterfat. Allowing for a 24 percent overrun, the gross paying price for a quantity of butterfat used in making one pound of butter was 53.60 cents. Producers paid costs of hauling this quantity of butterfat amounting to 3.53 cents. They paid no other charges in connection with their deliveries to the creamery. The gross paying price of 53.60 cents less the cost of hauling left a net return to producers of 50.07 cents for the butterfat which they supplied for making a pound of butter in the shipment.

The buyer of this butter was a wholesaler whose place of business is in New York City. The butter was transported by refrigerated truck in 123 fiber boxes, holding 60 pounds each, for consolidation at Dubuque. The consolidation function was carried out by a private trucking company which also transported this butter to New York City. At Dubuque the butter was reloaded on a refrigerated trailer truck which arrived in New York City on June 25, four days after it left the creamery. At the terminal of the trucking route, the butter was unloaded from the trailer and delivered by trucks owned by the wholesaler to its plant. At the plant, the butter was graded and placed under refrigeration.

The gross price paid by the buyer was 59.25 cents a pound. The total transportation cost amounted to 2.30 cents a pound. This included the cost of bringing the butter from the creamery to Dubuque for consolidation with the butter of other creameries and transporting it from there to New York City. Subtracting 2.30 cents from the gross price of 59.25 cents, leaves a net return to the creamery of 56.95 cents a pound. The difference between 56.95 cents and 53.60 cents, the amount paid by the creamery for the butterfat used in making a pound of butter, is 3.35 cents. This is the part of the marketing margin with respect to this shipment of butter which is represented by the creamery operation.

After the butter was graded and placed under refrigeration by the wholesaler, it was not possible to identify the movement of each box of butter.

Butter of the same grade from different creameries became undifferentiated from the standpoint of their uses to the wholesaler. This wholesaler sold both eggs and butter. He did not have facilities for the printing and packaging of butter. The greater part of his butter business consisted of resale of butter, in the original 60-pound fiber boxes, to large chainstore organizations which did their own printing and packaging. When sales to other stores were made, the wholesaler arranged for printing and packaging.

Chainstore buyers paid 59.75 cents a pound at the wholesaler's platform, for butter in bulk. This left the wholesaler a half cent a pound margin for his operations. In cases where delivery was made by the wholesaler, an additional one-fourth cent was charged.

Summary of Charges and Margins for Shipment Nine

		Cents per pound	
1.	Return to producer		50.07
2.	Hauling charge (farm to creamery) 1/	3.53	
3.	Price paid by creamery		53.60
4.	Creamery's margin	3.35	
5.	Consolidation and transportation 2/	2.30	
6.	Price paid by first receiver		59.25
7.	Margin of first receiver	0.75	
8.	Price paid by chainstore buyers 3/		60.00
9.	Chainstore's margin 4/	9.00	
10.	Price paid by consumer 5/		69.00

1/ Tax included.
2/ Consolidation and transportation charges not reported separately. Butter is taken from creamery by truck for consolidation at Dubuque, then transported by another truck to New York City.
3/ Chainstore buyers who do own printing and packaging.
4/ Includes cost of printing and packaging.
5/ Estimated average price for quarters in cartons.

Shipment Ten

This shipment of 9,360 pounds of Grade B butter left a creamery in Iowa on June 15, 1956. The raw material for this butter was produced by 385 farmers in the northwestern part of the State. All of the butterfat was delivered to the creamery in the form of cream, about 37 percent of which was sweet and the other 63 percent was sour cream of No. 1 quality.

The creamery paid 62 cents a pound for butterfat delivered in sweet cream and 60 cents a pound for butterfat in No. 1 sour cream. Butterfat in No. 2 sour cream, of which the creamery received a negligible quantity,

was paid for at 55 cents a pound. The weighted average price paid to its patrons for butterfat used in making the butter in this shipment was 60.73 cents a pound. Applying a 2½ percent overrun factor to the weighted average price, we find that the gross price paid by the creamery for a quantity of butterfat used in making a pound of butter was 48.98 cents. Producers were not required to pay for the cost of hauling cream to the creamery. The cream was hauled in trucks owned by the creamery and the cost of hauling was treated as an operational expense of the creamery. Producers paid one cent per pound of butterfat to the American Dairy Association or 0.81 cent for a quantity of butterfat used in making a pound of butter. Subtracting this from the gross paying price of 48.98 cents, we find that the net return to producers for an amount of butterfat used in making a pound of butter was 48.17 cents.

The creamery customarily paid a cash dividend to producers which for several immediately preceding years had amounted to 2 cents a pound of butterfat. The expectation of a similar cash dividend with respect to the butterfat used in making the butter under observation was not included in our computations. Assuming a continuation of past dividend policy, this exclusion deflates the return to producers (and inflates the margin for the creamery operation) by about 1.6 cents when allowance is made for overrun.

The buyer (first receiver) of this butter is a wholesaler whose place of business is in New York City. The butter was taken by truck in 144 fiber boxes, holding 65 pounds each, for consolidation at Fort Dodge, Iowa. The consolidation function was carried out by the same private trucking company which transported the butter from Fort Dodge to New York City. On arrival at Fort Dodge the butter was reloaded on a refrigerated trailer truck with butter from other creameries. It arrived at a New York terminal of the trucking company on June 18, three days after leaving the creamery. On the day of arrival it was picked up by a local trucking firm and part was delivered to a customer of the buyer and the remainder was delivered to the buyer's plant.

The gross price paid by the buyer was 57.75 cents a pound. The creamery paid the charges for consolidation at Fort Dodge and transportation from Fort Dodge to New York City, which together amounted to $187.37. It paid also $19.28 for local delivery charges after the butter arrived in New York City. These charges together amounted to 2.21 cents per pound of butter. Subtracting this from the gross price of 57.75 cents, gives a net return to the creamery of 55.54 cents. The difference between 55.54 cents and 48.98 cents, the amount paid by the creamery for the butterfat used in a pound of butter, is 6.56 cents. This was the creamery's margin for its operations which in this case included the cost of hauling its patrons' cream from their farms to the creamery.

The buyer of the butter carried on a wholesale business, supplying butter in bulk (that is, in 65-pound blocks in the fiber boxes as packed by the creamery) to bakeries, ice cream manufacturers or to jobbers for resale to bakeries, restaurants and stores. Where butter was sold to jobbers for

resale to restaurants and stores, arrangements were made for its printing and packaging by a firm in the vicinity which specialized in such work. The plant of the first receiver had no facilities for printing or grading. Grading of butter from each of the several creameries which shipped to this wholesaler was done every few months by an outside agency.

The greater part of the shipment, 130 boxes containing 8,450 pounds of butter, was unloaded at the trucking terminal on June 18, the day of arrival in New York City, and delivered directly to the plant of a firm which specialized in the printing of butter. Here it was unloaded and placed under refrigeration to prepare it for printing. The printing was done under contract with a customer of the wholesaler who had purchased the butter from the creamery. This customer was a jobber who supplies butter to restaurants and grocers. By arrangement with the jobber, the butter was printed and packaged in several ways: Pound solids, pounds in quarters, and patties in 5-pound packages. All packages had parchment outerwraps. After the butter was printed, the jobber picked it up in his own trucks and placed it in his own refrigerated storage facilities. From there it was used to fill orders of the jobber's customers. Deliveries to these customers (restaurants and retail stores) were made, in most cases, in the jobber's trucks.

The price paid by this jobber was 59 cents a pound. This provided a margin of 1.25 cents a pound on this part of the shipment. The price paid to the jobber by his restaurant customers for patties averaged 64.75 cents a pound. The charge paid by the jobber for printing the patties was 3 cents a pound which left him with an operating margin of 2.75 cents a pound.

The average prices paid to the jobber by his retail store customers were 62.75 cents for pound solids and 63.25 cents for pound packages in quarters. The charges paid by the jobber for printing were 1.25 cents a pound for solids and 1.75 cents a pound for quarters. In each case, the margin of the jobber was 2.5 cents a pound.

The first receiver sold the remaining 14 boxes of butter (910 pounds) in the original shipment from the creamery to a jobber who supplied butter, eggs, margarine, frozen fruit and other supplies to bakeries. This butter was first delivered by a local hauler to the plant of the first receiver from the terminal of the trucking company which brought the butter to New York City.

Here it was placed under refrigeration and was delivered to the jobber by the first receiver by handcart in response to three orders approximately a week apart. Sales to bakeries were made in bulk, in the original fiber boxes, holding 65 pounds each. Delivery of the butter to bakery customers was made by the jobber.

The price paid by this jobber was 60 cents a pound which allowed the first receiver a margin of 2.25 cents for this part of the shipment. Bakeries paid from 61.5 to 62 cents a pound for butter in bulk delivered to their stores. The average price paid was approximately 61.75 cents which allowed the jobber a margin of 1.75 cents a pound.

Summary of Charges and Margins for Shipment Ten

		Cents per pound	
1.	Return to producer 1/		48.17
2.	Charges paid by producers 2/	0.81	
3.	Price paid by creamery		48.98
4.	Creamery's margin	6.56	
5.	Consolidation and transportation 3/	2.21	
6.	Price paid by first receiver		57.75
7A.	Margin of first receiver (A part)	1.25	
8A.	Price paid by jobber		59.00
9A-1.	Margin of jobber	2.75	
10A-1.	Charge for printing (patties)	3.00	
11A-1.	Price paid by restaurants (patties) 4/		64.75
9A-2.	Margin of jobber (pound solids)	2.50	
10A-2.	Charge for printing (pound solids)	1.25	
11A-2.	Price paid by stores (pound solids) 4/		62.75
12A-2.	Margin of stores	7.25	
13A-2.	Price paid by consumer 5/		70.00
7B.	Margin of first receiver (B part)	2.25	
8B.	Price paid by jobber		60.00
9B.	Margin of jobber	1.75	
10B.	Price paid by bakeries 4/		61.75

1/ Cash dividends not included (2 cents a pound of butterfat in previous years).

2/ One cent a pound butterfat to American Dairy Association. Hauling of cream carried out by creamery without charge to producers.

3/ Includes costs of consolidation at Fort Dodge, Iowa, trucking to New York City, and delivery to wholesale receiver by local trucking firm.

4/ Approximate average. Prices charged vary as much as a cent a pound to meet different competitive conditions.

5/ Estimated average price for Grade B pound solids based on average price (72.2 cents) of Grade A salt butter in all forms reported by the Bureau of Labor Statistics for July 1956 in New York City. This estimate can be only a rough approximation of the actual average retail price for this part of the particular shipment.

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